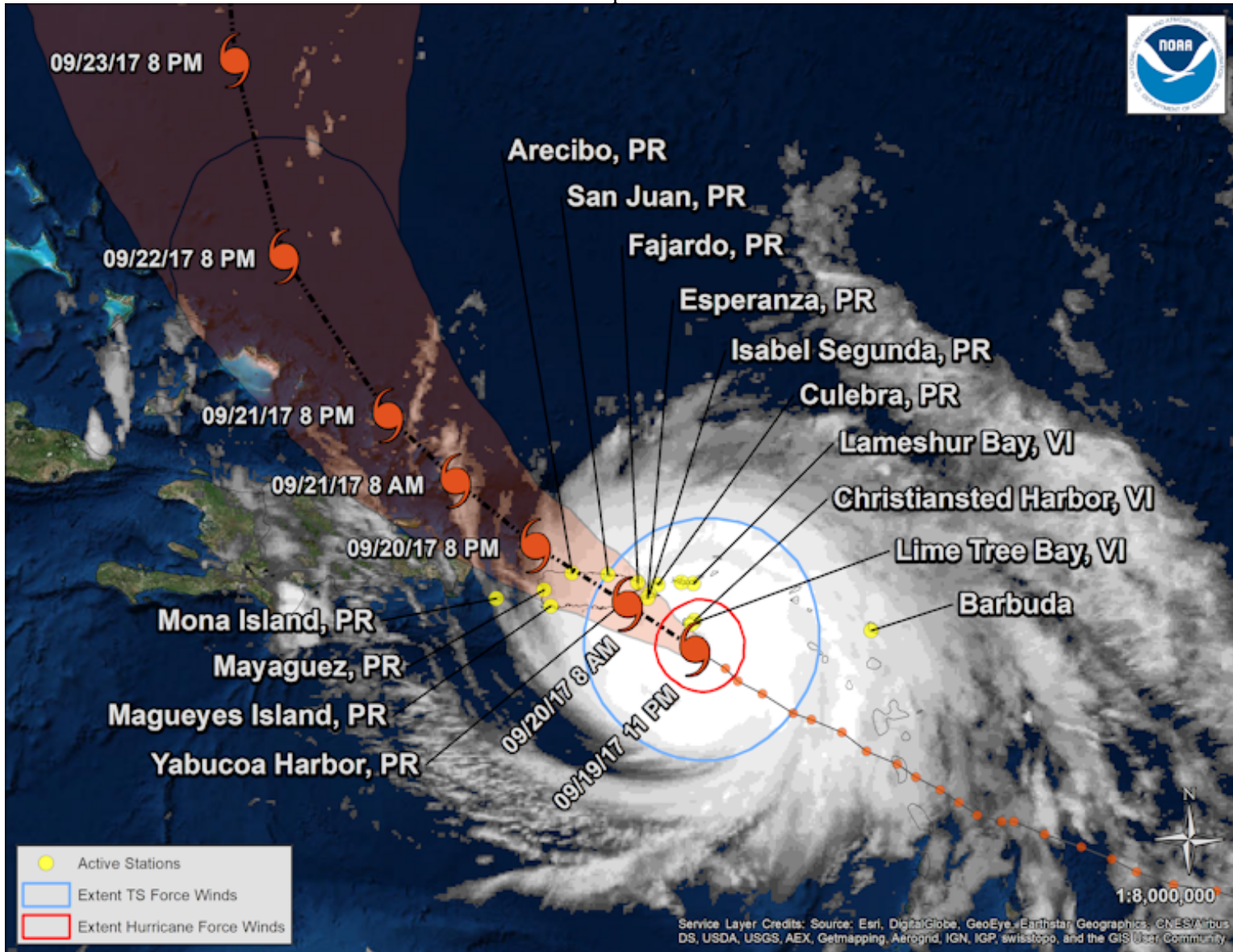




Hurricane MARIA QuickLook  
Posted: 00:00 AST 09/20/2017

#### NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 9/20/2017 00:00 AST, water levels surrounding the U.S. Virgin Islands are measuring between 1.0 and 2.0 feet above normal tide levels and are quickly rising. Winds over 40 knots, and gusts as high as 70 knots, are being observed at Christiansted Harbor and Lime Tree Bay. Water levels around Puerto Rico still measure within 1 foot of normal tide levels and winds generally range between 10 and 25 knots with slightly higher gusts. Barometric pressure is decreasing across the region as Maria approaches from the southeast.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: AC

-----  
SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Maria Advisory Number 16

NWS National Hurricane Center Miami FL

1100 PM AST Tue Sep 19 2017

...EYE OF POTENTIALLY CATASTROPHIC CATEGORY 5 HURRICANE MARIA NEARING ST. CROIX...

...CORE EXPECTED TO REACH SOUTHEASTERN PUERTO RICO WEDNESDAY MORNING...

SUMMARY OF 1100 PM AST...0300 UTC...INFORMATION

-----  
LOCATION...17.3N 64.7W

ABOUT 30 MI...45 KM SSE OF ST. CROIX

ABOUT 120 MI...190 KM SE OF SAN JUAN PUERTO RICO

MAXIMUM SUSTAINED WINDS...175 MPH...280 KM/H

PRESENT MOVEMENT...WNW OR 300 DEGREES AT 10 MPH...17 KM/H

MINIMUM CENTRAL PRESSURE...909 MB...26.85 INCHES

WATCHES AND WARNINGS

-----  
CHANGES WITH THIS ADVISORY:

None

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

\* U.S. Virgin Islands

\* British Virgin Islands

\* Puerto Rico, Culebra, and Vieques

\* Dominican Republic from Cabo Engano to Puerto Plata

A Tropical Storm Warning is in effect for...

\* Saba and St. Eustatius

\* St. Maarten

\* Guadeloupe

\* Dominican Republic west of Puerto Plata to the northern border of the Dominican Republic and Haiti

\* Dominican Republic west of Cabo Engano to Punta Palenque

A Hurricane Watch is in effect for...

\* Saba and St. Eustatius

\* St. Maarten

\* St. Martin and St. Barthelemy

\* Dominican Republic from Isla Saona to Cabo Engano

\* Turks and Caicos Islands and the Southeastern Bahamas

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

Interests elsewhere in Hispaniola and the Bahamas should monitor the progress of Maria.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

## DISCUSSION AND 48-HOUR OUTLOOK

-----

At 1100 PM AST (0300 UTC), the center of Hurricane Maria was located near latitude 17.3 North, longitude 64.7 West. Maria is moving toward the west-northwest near 10 mph (17 km/h). A west-northwest to northwest motion is expected to continue through Wednesday night, followed by a northwestward motion on Thursday. On the forecast track, the eye of Maria will move near or over St. Croix in the U.S. Virgin Islands within the next couple of hours, then cross Puerto Rico on Wednesday, and pass just north of the northeast coast of the Dominican Republic Wednesday night and Thursday.

Maximum sustained winds are near 175 mph (280 km/h) with higher gusts. Maria is a potentially catastrophic category 5 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity could occur before the hurricane reaches Puerto Rico, but Maria is forecast to remain an extremely dangerous category 4 or 5 hurricane as it moves near or over the Virgin Islands and Puerto Rico. Slow weakening is expected after the hurricane emerges over the Atlantic north of Puerto Rico and the Dominican Republic.

Reports from reconnaissance aircraft indicate that the area of hurricane-force winds has increased in size. Hurricane-force winds now extend outward up to 60 miles (95 km) from the center and tropical-storm-force winds extend outward up to 150 miles (240 km).

The estimated minimum central pressure is 909 mb (26.85 inches).

#### HAZARDS AFFECTING LAND

-----

**WIND:** Tropical storm conditions will continue in portions of the warning area in the Leeward Islands tonight. Tropical storm and hurricane conditions are occurring over the Virgin Islands and will spread over Puerto Rico overnight. Hurricane conditions are expected within the hurricane warning area in the Dominican Republic late Wednesday, with tropical storm conditions expected by early Wednesday. Tropical storm conditions are expected in the tropical storm warning areas in the Dominican Republic on Wednesday. Hurricane and tropical storm conditions are possible on Thursday in the Turks and Caicos Islands and the southeastern Bahamas.

Wind speeds atop and on the windward sides of hills and mountains and on high-rise buildings could be much stronger than the near-surface winds indicated in this advisory.

**STORM SURGE:** A dangerous storm surge accompanied by large and destructive waves will raise water levels by as much as 7 to 11 feet above normal tide levels in the hurricane warning area near where the center of Maria moves across the Leeward Islands and the British Virgin Islands.

A dangerous storm surge accompanied by large and destructive waves will raise water levels by as much as 4 to 6 feet above normal tide levels in the hurricane warning area in the Dominican Republic, and 1 to 3 ft elsewhere along the northern coasts of the Dominican Republic and Haiti.

The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following heights above ground if the peak surge occurs at the time of high tide...

Puerto Rico and the U.S. Virgin Islands...6 to 9 ft

The deepest water will occur along the immediate coast near and to the north and east of the landfall location, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Maria is expected to produce the following rain accumulations through Friday:

Central and southern Leeward Islands...additional 1 to 3 inches.

Northern Leeward Islands from Barbuda to Anguilla...additional 3 to 6 inches.

U.S. and British Virgin Islands...additional 8 to 12 inches, isolated 16 inches.

Puerto Rico...12 to 18 inches, isolated 25 inches.

Eastern Dominican Republic...4 to 8 inches, isolated 12 inches.

Rainfall on all of these islands will cause life-threatening flash floods and mudslides.

TORNADOES: Several tornadoes are possible over Puerto Rico and the U. S. Virgin Islands tonight and Wednesday.

SURF: Swells generated by Maria are affecting the Leeward Islands, Puerto Rico, and the Virgin Islands. These swells will begin affecting the northern coast of Hispaniola, the Turks and Caicos Islands, and the Southeastern Bahamas during the next day or two. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

-----

Next intermediate advisory at 200 AM AST.

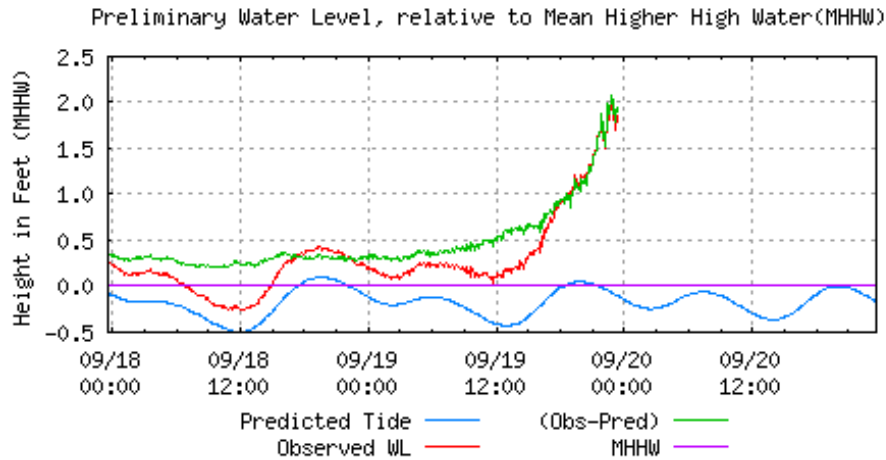
Next complete advisory at 500 AM AST.

Forecaster Brown

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Christiansted Harbor, St Croix - Water Level, Christiansted Harbor, St Croix - Winds, Christiansted Harbor, St Croix - Barometric, Lime Tree Bay, St. Croix - Water Level, Lime Tree Bay, St. Croix - Winds, Lime Tree Bay, St. Croix - Barometric, Lameshur Bay, St John - Water Level, Lameshur Bay, St John - Barometric, Culebra - Water Level, Culebra - Barometric, Esperanza, Vieques Island - Water Level, Esperanza, Vieques Island - Winds, Esperanza, Vieques Island - Barometric, Isabel Segunda, Vieques Island - Water Level, Isabel Segunda, Vieques Island - Winds, Fajardo - Water Level, Fajardo - Winds, Yabucoa Harbor - Water Level, Yabucoa Harbor - Winds, San Juan, La Puntilla, San Juan Bay - Water Level, San Juan, La Puntilla, San Juan Bay - Winds, San Juan, La Puntilla, San Juan Bay - Barometric, Arecibo - Water Level, Arecibo - Winds, Arecibo - Barometric, Magueyes Island - Water Level, Magueyes Island - Winds, Magueyes Island - Barometric, Mayaguez - Water Level, Mayaguez - Winds, Mayaguez - Barometric, Mona Island - Water Level, Mona Island - Barometric, Barbuda - Water Level, Barbuda - Barometric

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI



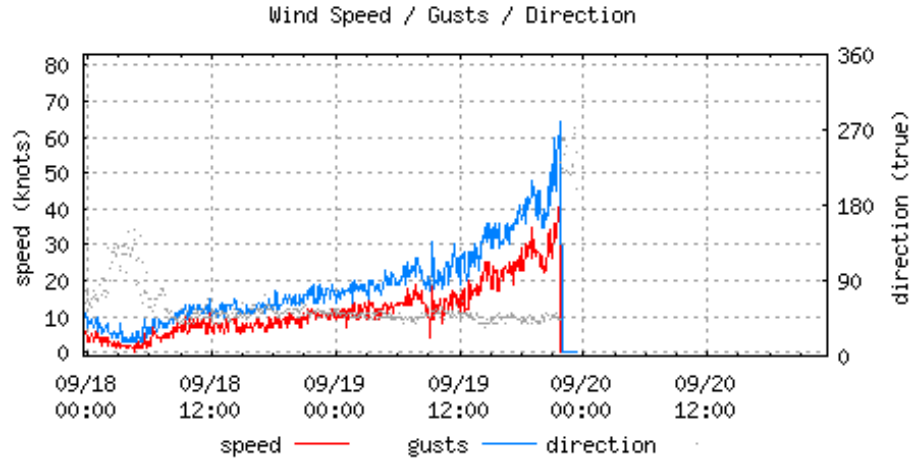
Last Observed Sample: 09/19/2017 23:24 (AST). Data relative to MHHW

Observed: 1.79 ft. Predicted: -0.11 ft. Residual: 1.90 ft.

Historical Maximum Water Level: Oct 16 2008, 1.17 ft.

Next High Tide: 09/20/2017 07:24 (AST), -0.06 ft.

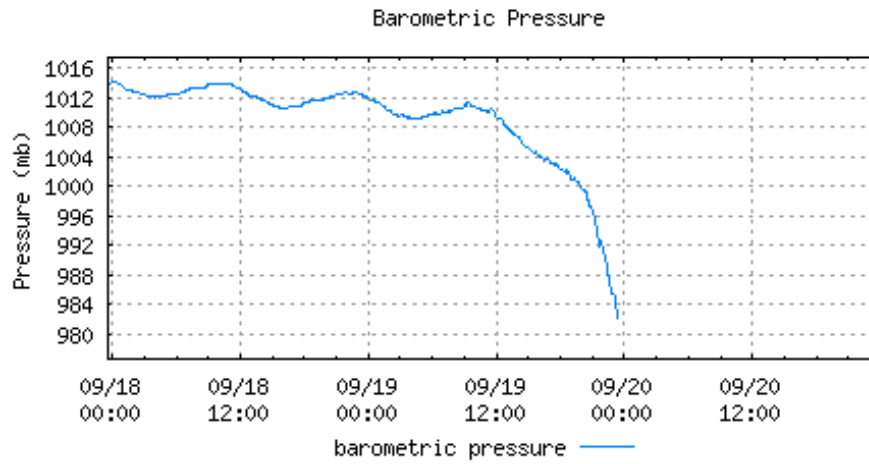
NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI



Last Observed Sample: 09/19/2017 23:24 (AST)

Wind Speed: 0 knots Gusts: 0 knots Direction: 199° T

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI

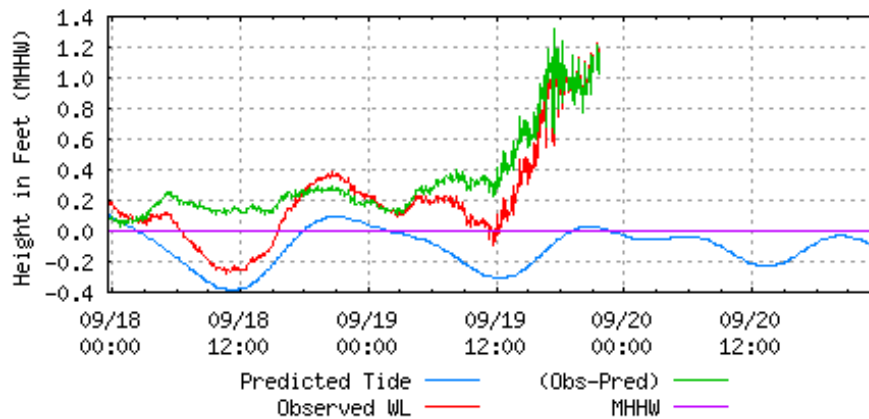


Last Observed Sample: 09/19/2017 23:24 (AST)

Barometric Pressure: 982.0 mb

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



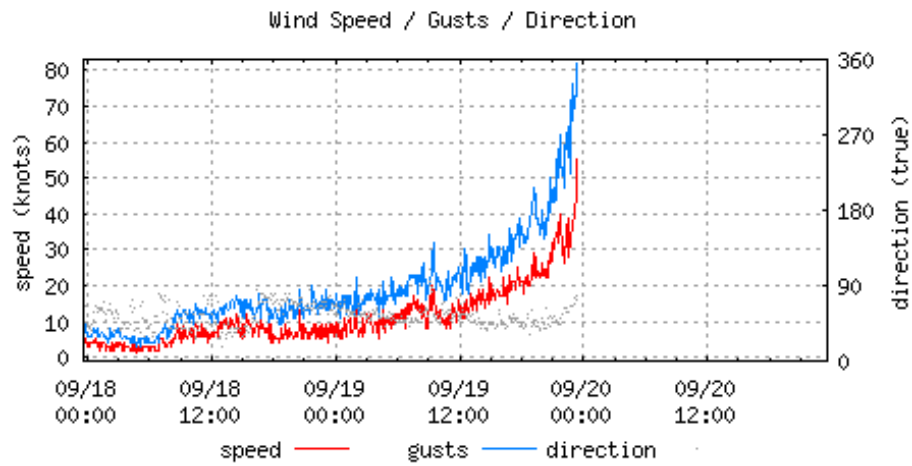
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 1.18 ft. Predicted: 0.02 ft. Residual: 1.16 ft.

Historical Maximum Water Level: Nov 17 1999, 1.88 ft.

Next High Tide: 09/20/2017 05:50 (AST), -0.04 ft.

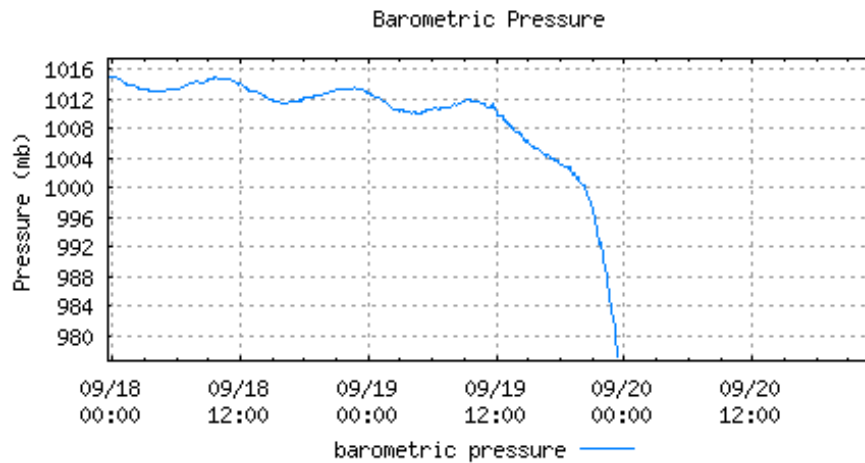
NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 57 knots Gusts: 77 knots Direction: 86° T

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI



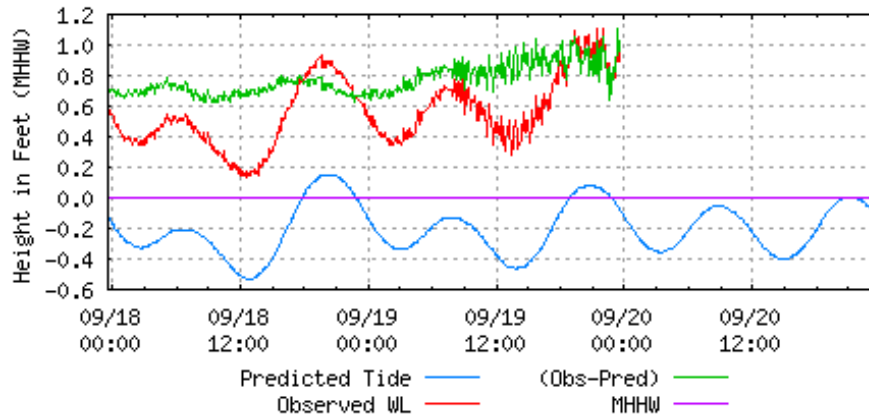
Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 976.8 mb



NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

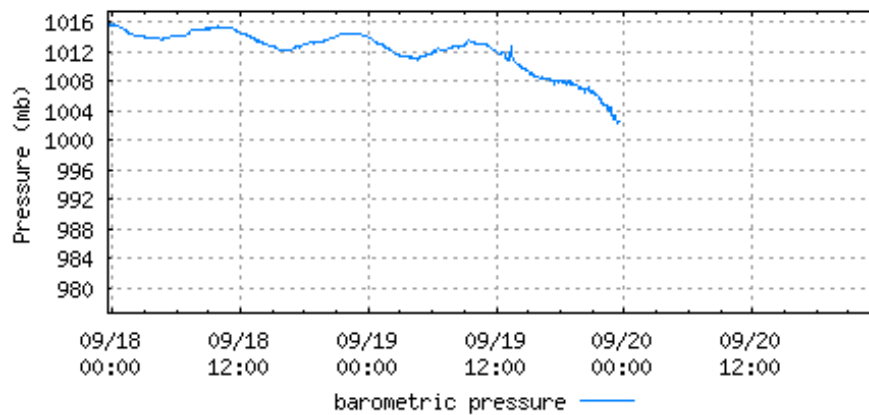
Observed: 0.89 ft. Predicted: -0.07 ft. Residual: 0.96 ft.

Historical Maximum Water Level: Aug 30 2010, 0.89 ft.

Next High Tide: 09/20/2017 08:47 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

Barometric Pressure

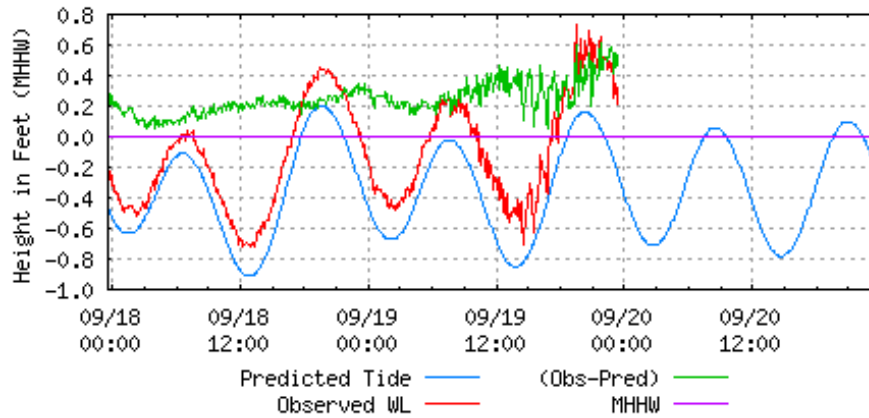


Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1002.5 mb

NOAA/NOS/CO-OPS 9752235 Culebra, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

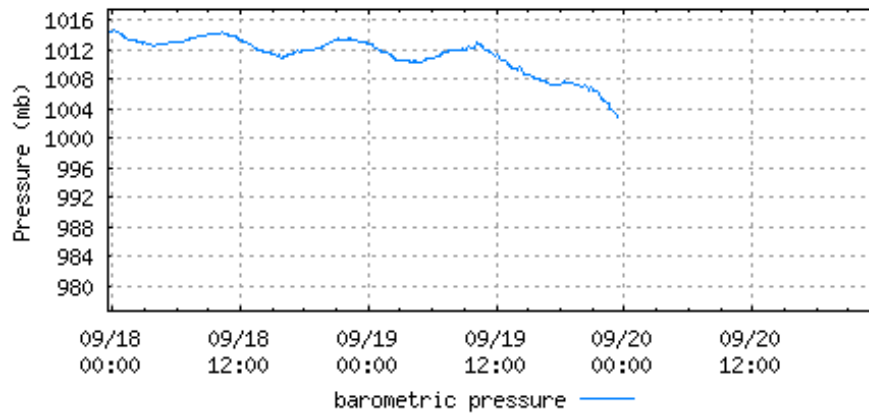
Observed: 0.34 ft. Predicted: -0.27 ft. Residual: 0.61 ft.

Historical Maximum Water Level: Nov 6 2006, 0.84 ft.

Next High Tide: 09/20/2017 08:29 (AST), 0.06 ft.

NOAA/NOS/CO-OPS 9752235 Culebra, PR

Barometric Pressure

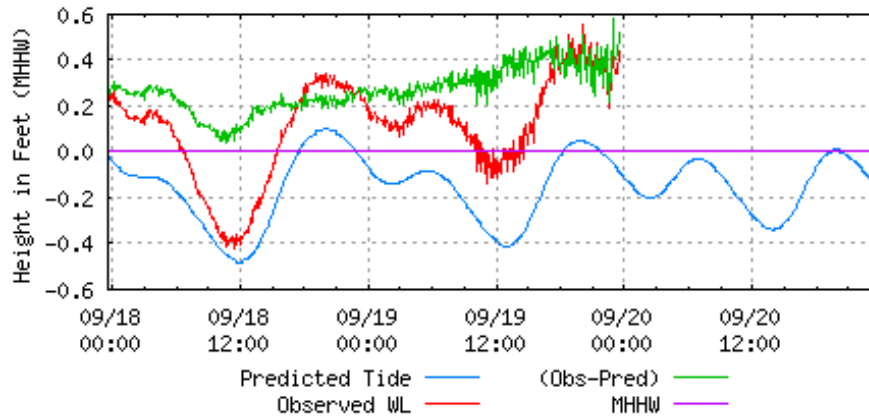


Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1002.6 mb

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

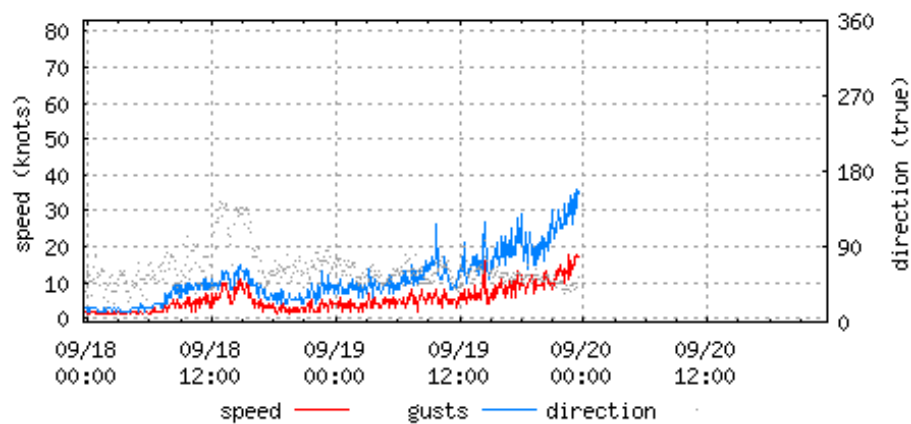
Observed: 0.44 ft. Predicted: -0.08 ft. Residual: 0.52 ft.

Historical Maximum Water Level: Aug 22 2011, 0.99 ft.

Next High Tide: 09/20/2017 06:57 (AST), -0.03 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

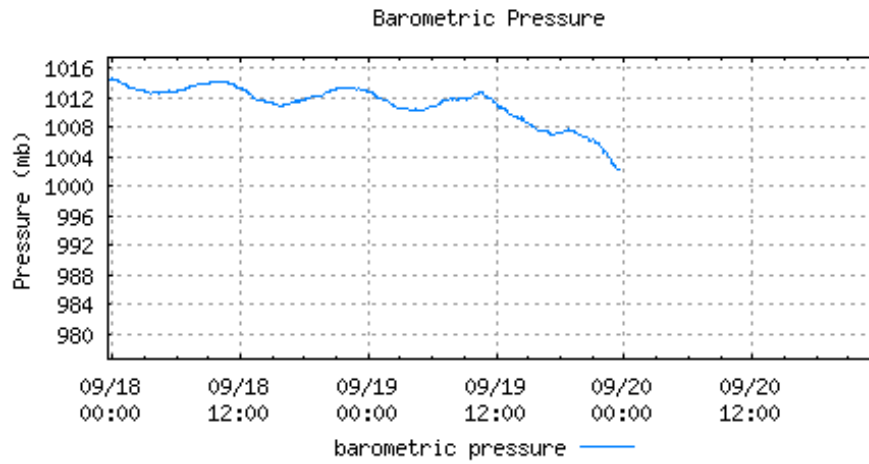
Wind Speed / Gusts / Direction



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 17 knots Gusts: 35 knots Direction: 54° T

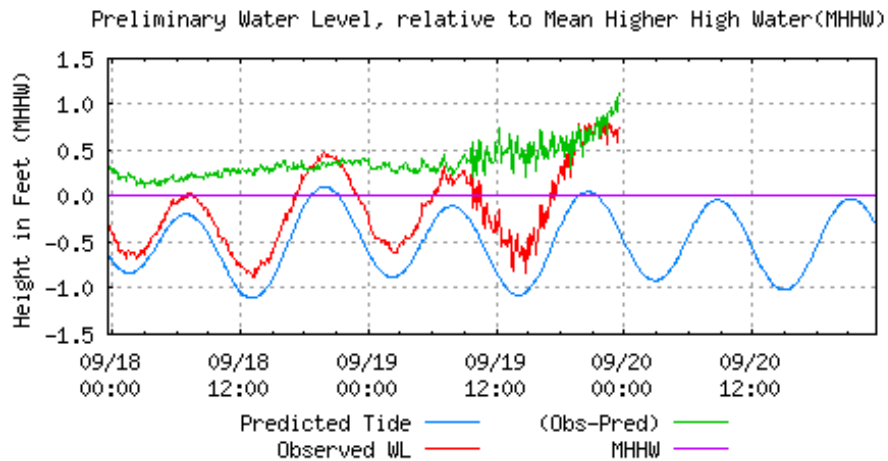
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1002.1 mb

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



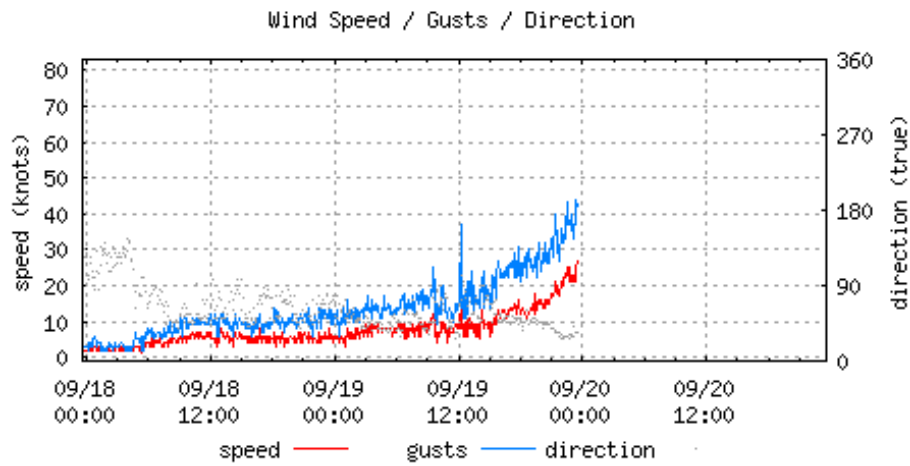
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 0.75 ft. Predicted: -0.38 ft. Residual: 1.13 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/20/2017 08:42 (AST), -0.04 ft.

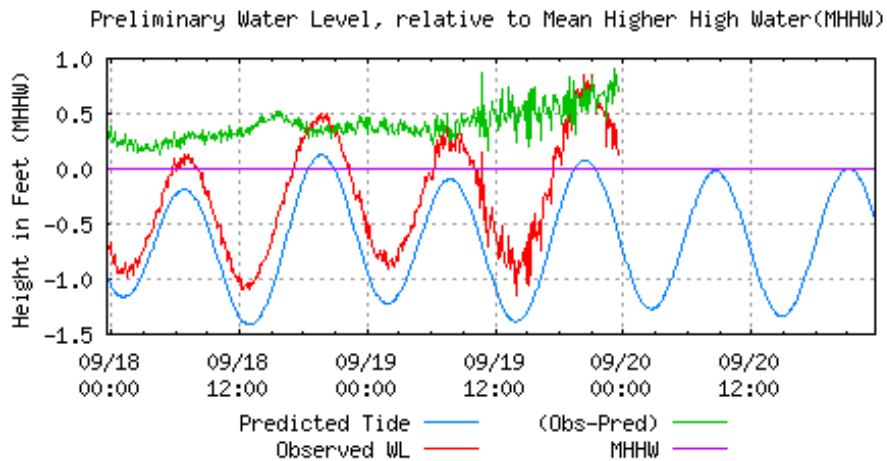
NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 27 knots Gusts: 42 knots Direction: 34° T

NOAA/NOS/CO-OPS 9753216 Fajardo, PR



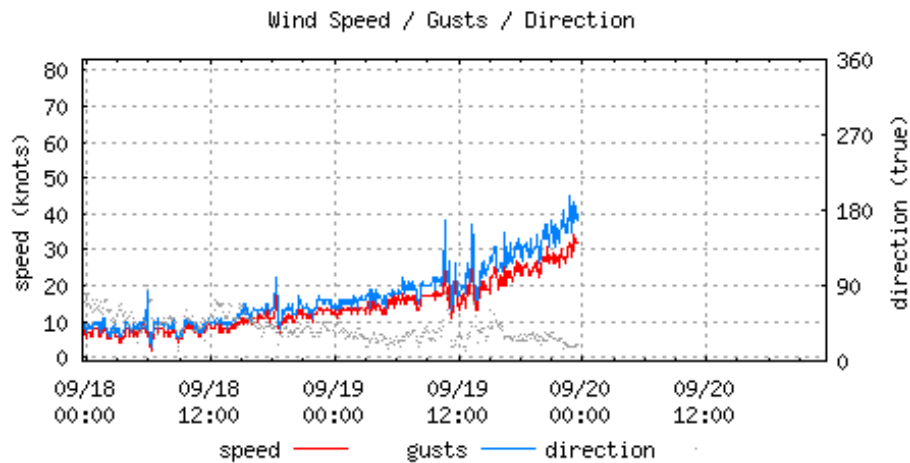
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 0.12 ft. Predicted: -0.59 ft. Residual: 0.71 ft.

Historical Maximum Water Level: Aug 30 2010, 0.84 ft.

Next High Tide: 09/20/2017 08:37 (AST), -0.02 ft.

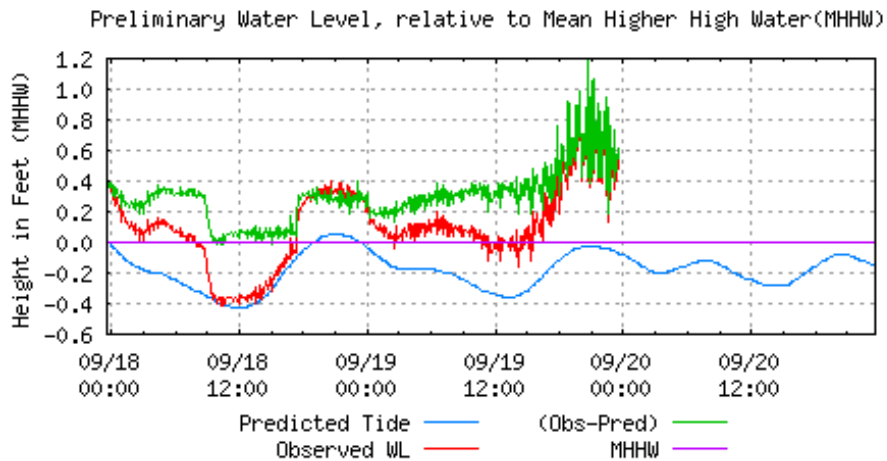
NOAA/NOS/CO-OPS 9753216 Fajardo, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 32 knots Gusts: 38 knots Direction: 19° T

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



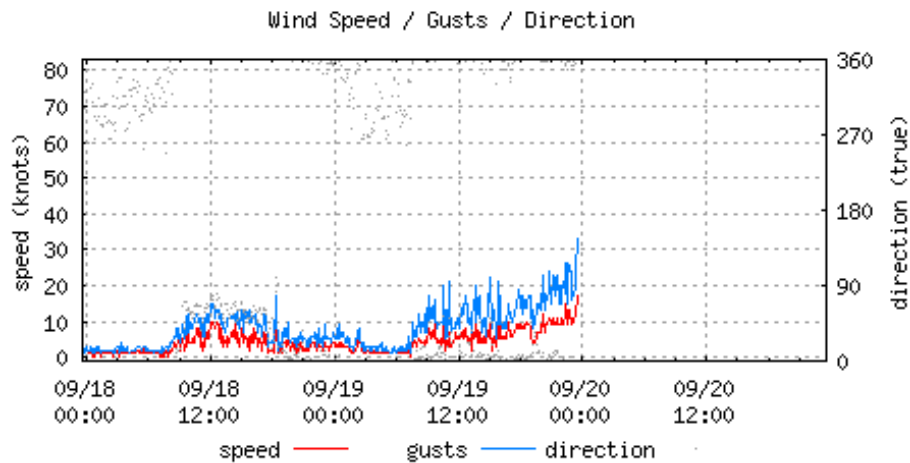
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 0.54 ft. Predicted: -0.07 ft. Residual: 0.61 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/20/2017 07:44 (AST), -0.13 ft.

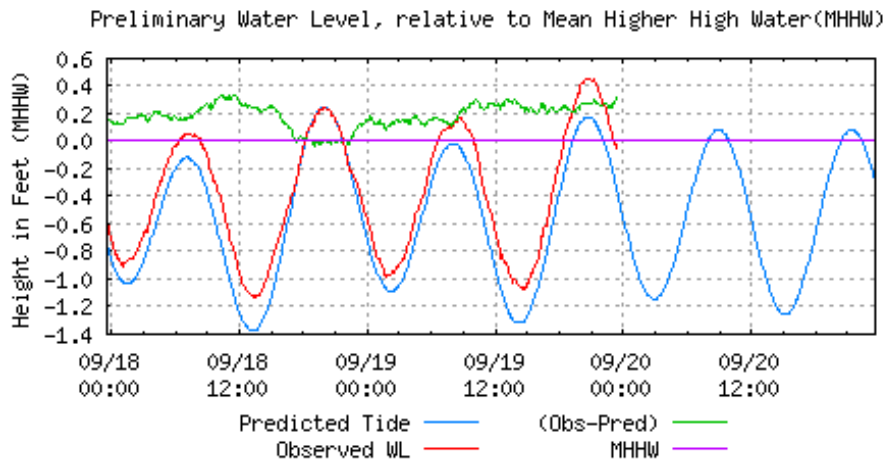
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 17 knots Gusts: 33 knots Direction: 1° T

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



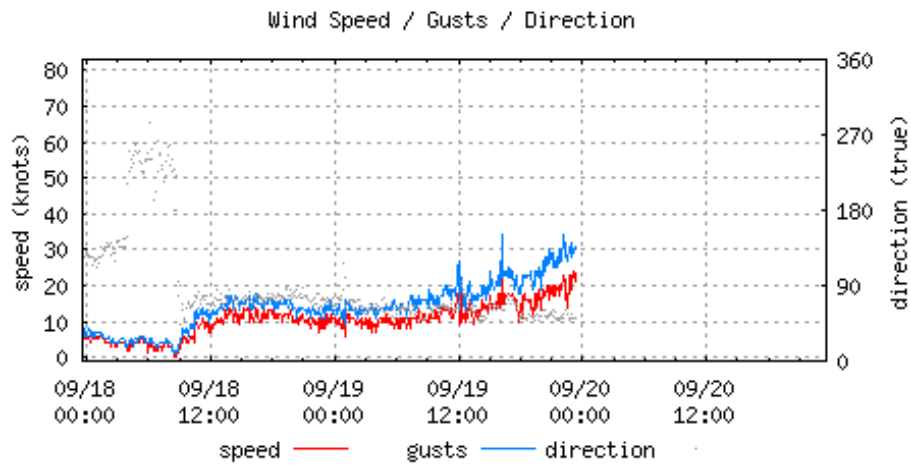
Last Observed Sample: 09/19/2017 23:24 (AST). Data relative to MHHW

Observed: -0.04 ft. Predicted: -0.36 ft. Residual: 0.32 ft.

Historical Maximum Water Level: Sep 18 1989, 2.77 ft.

Next High Tide: 09/20/2017 08:55 (AST), 0.08 ft.

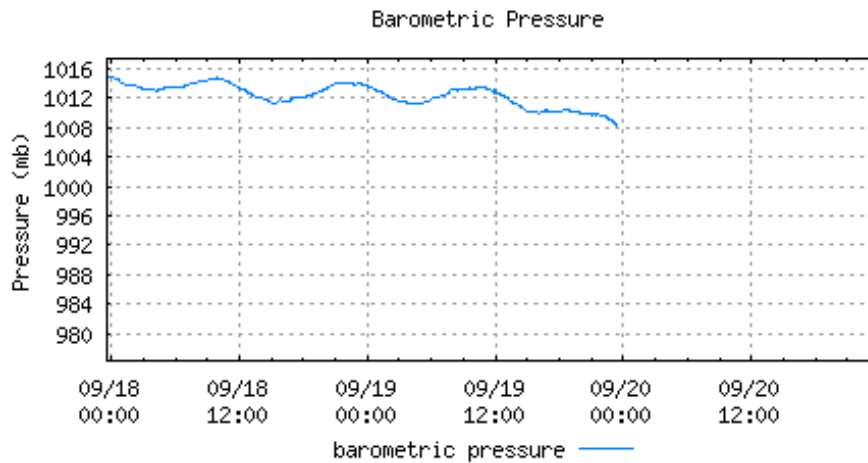
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/19/2017 23:24 (AST)

Wind Speed: 21 knots Gusts: 31 knots Direction: 51° T

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR

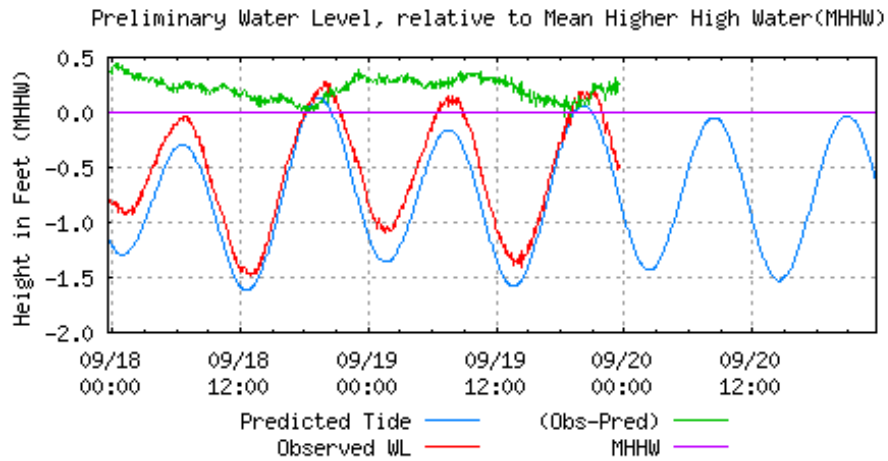


Last Observed Sample: 09/19/2017 23:24 (AST)

Barometric Pressure: 1008.3 mb



NOAA/NOS/CO-OPS 9757809 Arecibo, PR



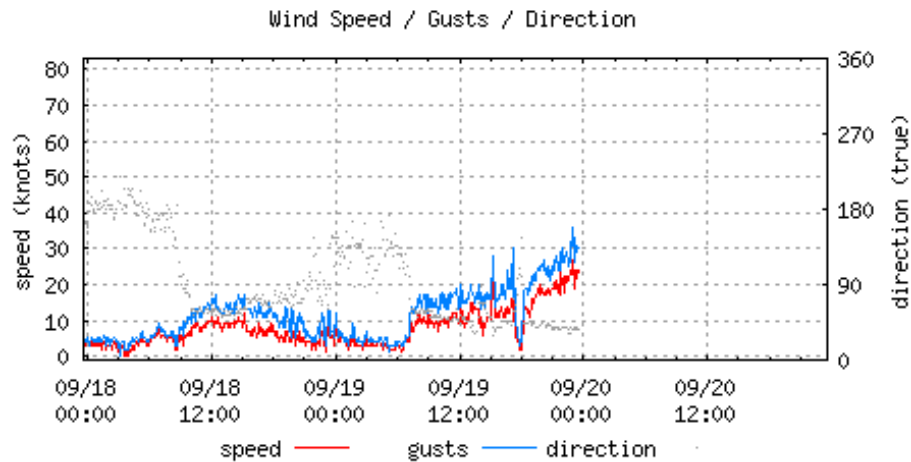
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: -0.51 ft. Predicted: -0.77 ft. Residual: 0.26 ft.

Historical Maximum Water Level: Oct 8 2010, 0.90 ft.

Next High Tide: 09/20/2017 08:22 (AST), -0.04 ft.

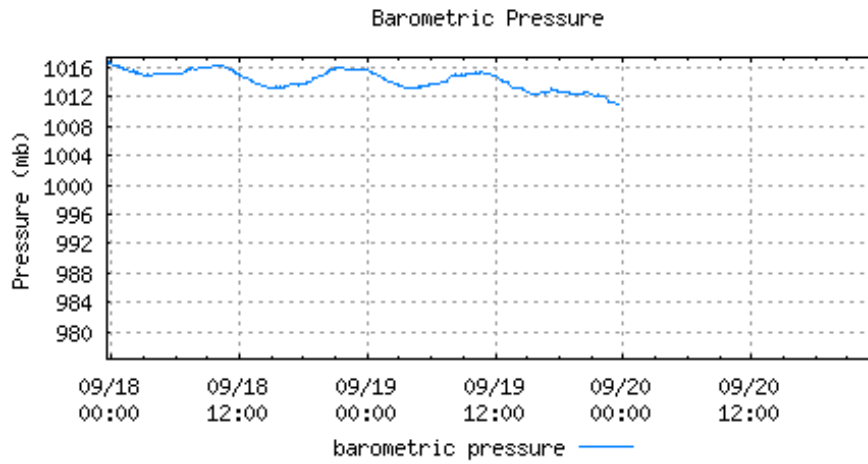
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 24 knots Gusts: 30 knots Direction: 36° T

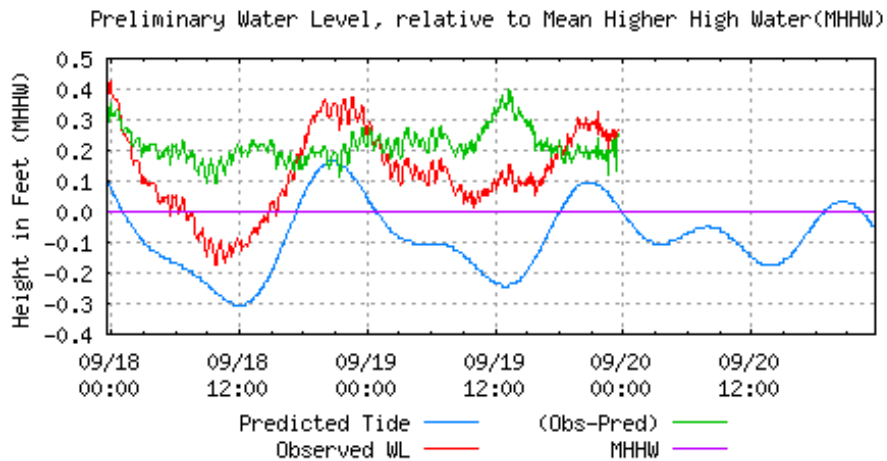
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1010.9 mb

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



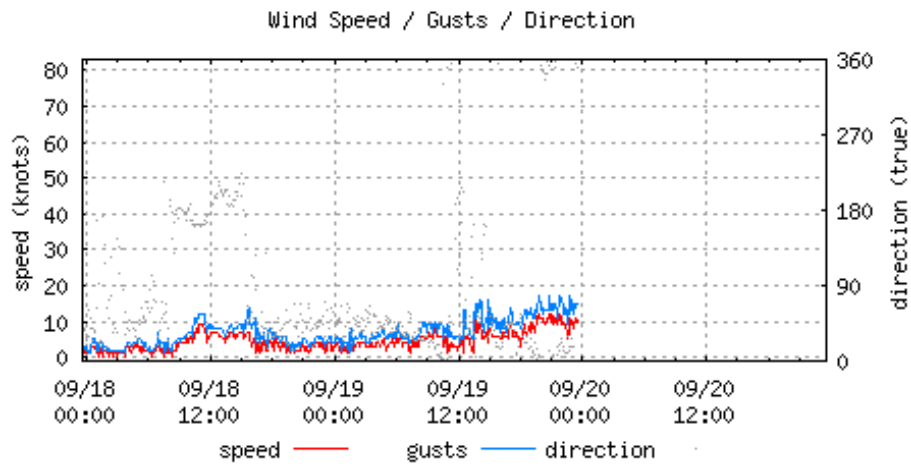
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 0.26 ft. Predicted: 0.01 ft. Residual: 0.25 ft.

Historical Maximum Water Level: Aug 31 1979, 1.96 ft.

Next High Tide: 09/20/2017 07:51 (AST), -0.05 ft.

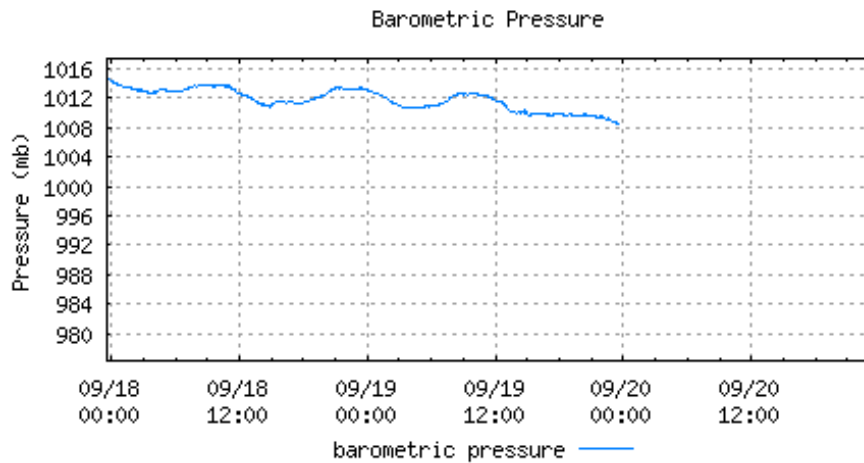
NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Wind Speed: 10 knots Gusts: 15 knots Direction: 351° T

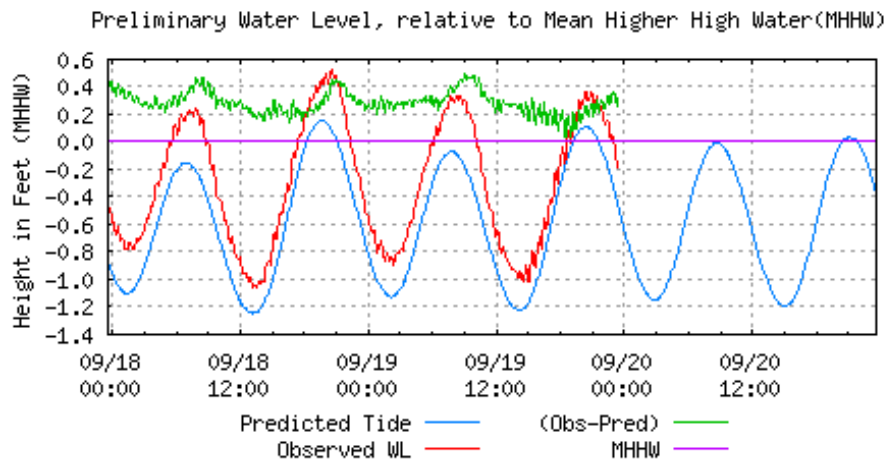
NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1008.5 mb

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



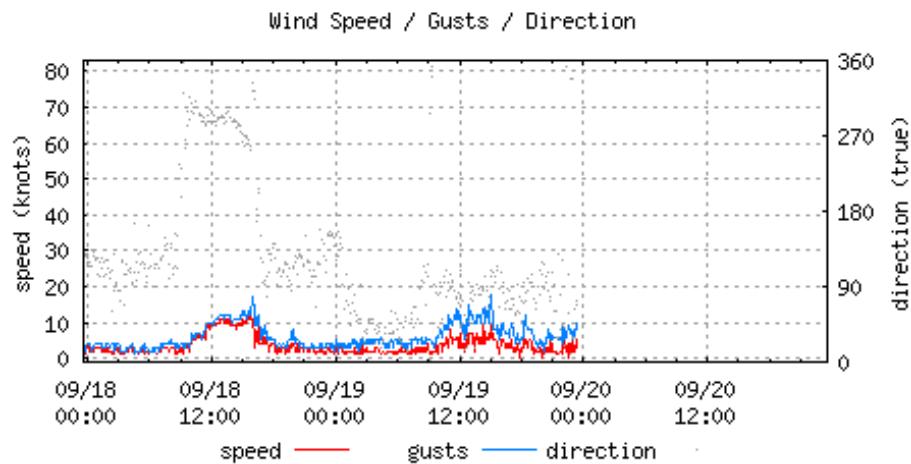
Last Observed Sample: 09/19/2017 23:24 (AST). Data relative to MHHW

Observed: -0.15 ft. Predicted: -0.47 ft. Residual: 0.32 ft.

Historical Maximum Water Level: Oct 1 2015, 0.99 ft.

Next High Tide: 09/20/2017 08:39 (AST), -0.01 ft.

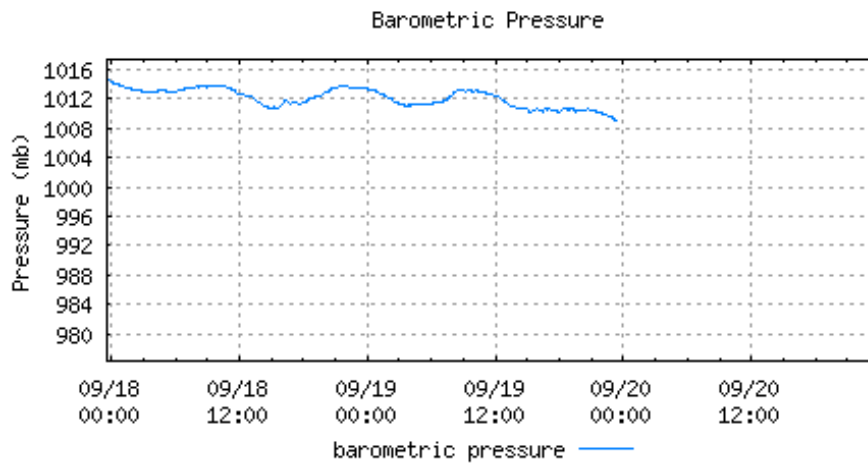
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



Last Observed Sample: 09/19/2017 23:24 (AST)

Wind Speed: 5 knots Gusts: 10 knots Direction: 67° T

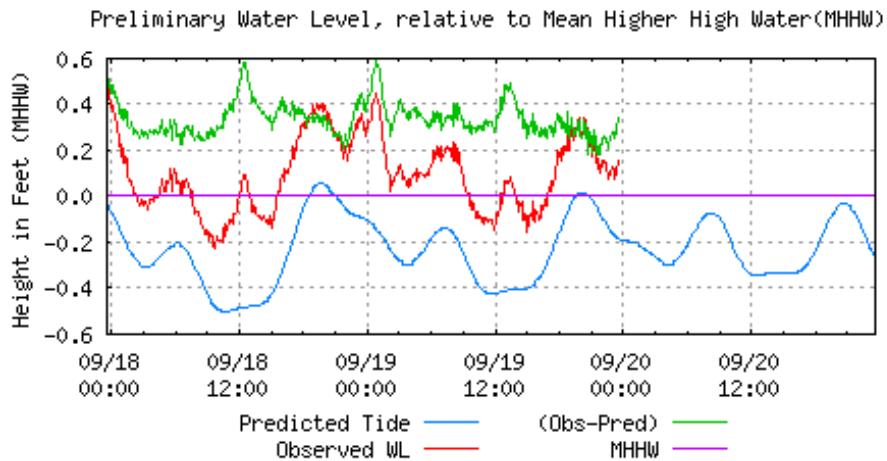
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



Last Observed Sample: 09/19/2017 23:24 (AST)

Barometric Pressure: 1009.0 mb

NOAA/NOS/CO-OPS 9759938 Mona Island, PR



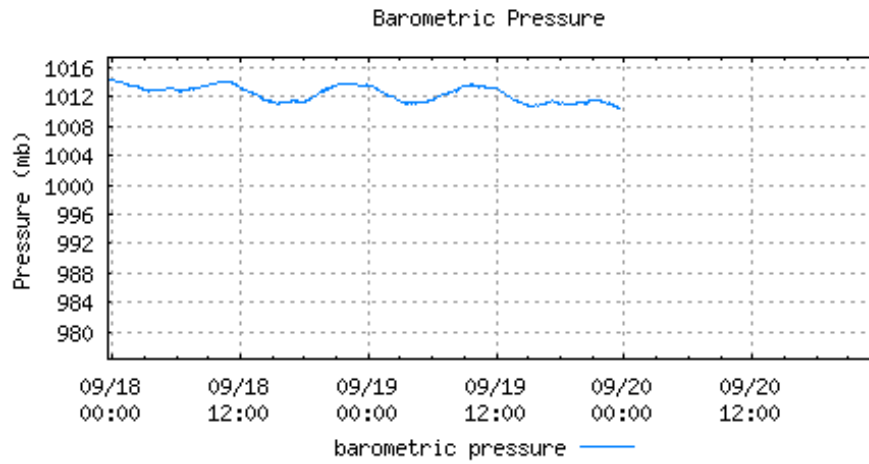
Last Observed Sample: 09/19/2017 23:30 (AST). Data relative to MHHW

Observed: 0.16 ft. Predicted: -0.18 ft. Residual: 0.34 ft.

Historical Maximum Water Level: Dec 23 2010, 1.24 ft.

Next High Tide: 09/20/2017 08:14 (AST), -0.07 ft.

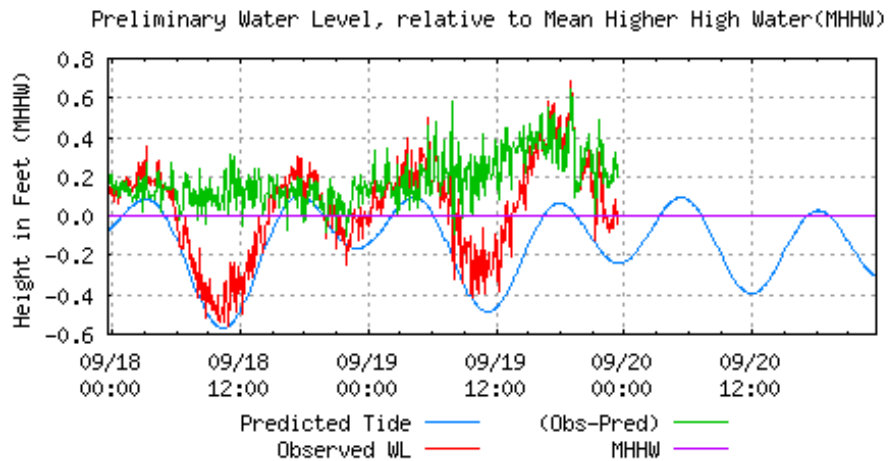
NOAA/NOS/CO-OPS 9759938 Mona Island, PR



Last Observed Sample: 09/19/2017 23:30 (AST)

Barometric Pressure: 1010.4 mb

NOAA/NOS/CO-OPS 9761115 Barbuda



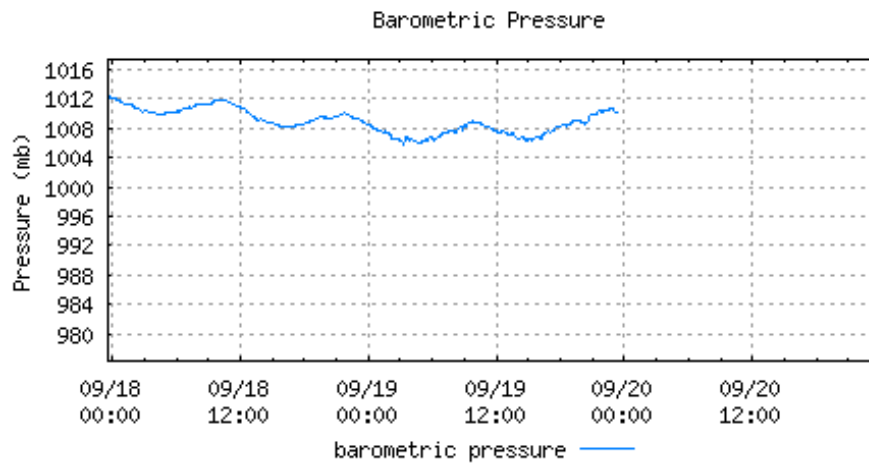
Last Observed Sample: 09/19/2017 23:24 (AST). Data relative to MHHW

Observed: -0.04 ft. Predicted: -0.24 ft. Residual: 0.20 ft.

Historical Maximum Water Level: Aug 23 2012, 1.05 ft.

Next High Tide: 09/20/2017 05:19 (AST), 0.09 ft.

NOAA/NOS/CO-OPS 9761115 Barbuda



Last Observed Sample: 09/19/2017 23:24 (AST)

Barometric Pressure: 1010.1 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9751364	Christiansted Harbor, St Croix, VI	09/19/2017 23:24 (AST)	1.79 ft	-0.11 ft	1.90 ft	2.00 ft
9751401	Lime Tree Bay, St. Croix, VI	09/19/2017 23:30 (AST)	1.18 ft	0.02 ft	1.16 ft	1.24 ft
9751381	Lameshur Bay, St John, VI	09/19/2017 23:30 (AST)	0.89 ft	-0.07 ft	0.96 ft	1.10 ft
9752235	Culebra, PR	09/19/2017 23:30 (AST)	0.34 ft	-0.27 ft	0.61 ft	0.73 ft
9752695	Esperanza, Vieques Island, PR	09/19/2017 23:30 (AST)	0.44 ft	-0.08 ft	0.52 ft	0.56 ft
9752619	Isabel Segunda, Vieques Island, PR	09/19/2017 23:30 (AST)	0.75 ft	-0.38 ft	1.13 ft	0.86 ft
9753216	Fajardo, PR	09/19/2017 23:30 (AST)	0.12 ft	-0.59 ft	0.71 ft	0.84 ft
9754228	Yabucoa Harbor, PR	09/19/2017 23:30 (AST)	0.54 ft	-0.07 ft	0.61 ft	1.17 ft
9755371	San Juan, La Puntilla, San Juan Bay, PR	09/19/2017 23:24 (AST)	-0.04 ft	-0.36 ft	0.32 ft	0.46 ft
9757809	Arecibo, PR	09/19/2017 23:30 (AST)	-0.51 ft	-0.77 ft	0.26 ft	0.24 ft
9759110	Magueyes Island, PR	09/19/2017 23:30 (AST)	0.26 ft	0.01 ft	0.25 ft	0.34 ft
9759394	Mayaguez, PR	09/19/2017 23:24 (AST)	-0.15 ft	-0.47 ft	0.32 ft	0.37 ft
9759938	Mona Island, PR	09/19/2017 23:30 (AST)	0.16 ft	-0.18 ft	0.34 ft	0.45 ft
9761115	Barbuda	09/19/2017 23:24 (AST)	-0.04 ft	-0.24 ft	0.20 ft	0.68 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce